UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
Washington, D. C.

and

ARIZONA AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF ARIZONA
Tucson, Arizona

and

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington, D. C.

NOTICE OF RELEASE OF KUIVATO LEHMANN LOVEGRASS

The Agricultural Research Service, U. S. Department of Agriculture, the Arizona Agricultural Experiment Station, and the Soil Conservation Service, U. S. Department of Agriculture, announce the release and naming of Kuivato Lehmann lovegrass. It was developed by the Agricultural Research Service, USDA in cooperation with the Soil Conservation Service, USDA and the Arizona Agricultural Experiment Station, Tucson, Arizona.

The cultivar, Kuivato, (pronounced ku e vato, Indian tribe language translated as--"greeting the sun") was selected as a single aberrant plant from Plant Introduction No. 198-581 and designated as experimental L-38. Experimental L-38, Eragrostis lehmanniana L., Lehmann lovegrass, was selected among sources through a program-controlled environment in a plant growth chamber. The cultivar Kuivato was superior for seedling drouth tolerance in the growth chamber and during establishment under natural environmental stresses, and for

plant survival and forage production among and within rangeland sites. It produced 25% more forage yield and the yield to density ratio was 64% greater than A-68 Lehmann lovegrass. Research has shown that Lehmann lovegrass was more efficient in water use than any other known forage or crop species. Kuivato was the most efficient for water use of Lehmann lovegrass. It required 21% less water to produce an equal amount of herbage than A-68. Kuivato is an excellent seed producer with reseeding characteristics under natural environments. Kuivato was developed for tolerance under stress environments of the Southwest and is adapted to semiarid and arid grasslands for seeding deteriorated rangeland sites at elevations generally below 1,400 m with 25 to 30 cm annual rainfall. Characteristics include intermediate seed weight, chromosome number 2n=40, bunch type growth habit, blue-green foliage color, yellow-anther color, and postharvest seed dormancy. Dormant seed are metabolically alive and seed laboratory tests are effective in evaluating germination.

Seed production of Kuivato lovegrass is limited to foundation and certified seed from breeder seed. Breeder seed will be maintained by the Department of Plant Sciences, Arizona Agricultural Experiment Station, University of Arizona, Tucson, Arizona.

Administrator
Agricultural Research Service
U. S. Department of Agriculture

Date

Gerald R. Stairs

9-16-76

Director
Arizona Agricultural Experiment Station

Date

Administrator
Soil Conservation Service
U. S. Department of Agriculture

Date